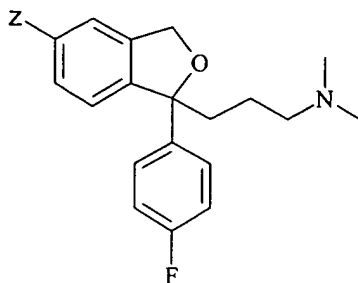


# CLAIMS

1. A process for the manufacture of a salt of citalopram, comprising the steps of:
  - (a) freeing citalopram base;
  - (b) precipitating the citalopram base in crystalline form;
  - (c) optionally recrystallising the citalopram base one or more times; and
  - (d) then transforming the citalopram base into a pharmaceutically acceptable citalopram salt.

2. The process of claim 1, wherein the step of freeing the citalopram base comprises freeing the citalopram base from a crude salt or a crude mixture of citalopram.

3. A process for the manufacture of citalopram base or a salt of citalopram, wherein one or more impurities of the formula



(II)

wherein Z is halogen,  $-O-SO_2-(CF_2)_n-CF_3$ , where n is 0-8,  $-CHO$ ,  $-NHR^1$ ,  $-COOR^2$ ,  $-CONR^2R^3$  wherein  $R^2$  and  $R^3$  are selected from hydrogen, alkyl, optionally substituted aryl or aralkyl, and  $R^1$  is hydrogen or alkylcarbonyl, is removed from a crude mixture of citalopram or from a crude salt of

4. The process of claim 3 wherein the crude mixture of citalopram or crude salt of citalopram is prepared by subjecting a compound of formula II to a cyanide exchange reaction with a cyanide source.
5. The process of claim 3, wherein Z is halogen.
6. The process of claim 5, wherein the halogen is bromide or chloride.

7. The process of claim 3 or 4, further comprising the step of purifying the crude mixture of citalopram before the step of precipitating citalopram base in crystalline form.
- 5 8. The process of claim 3 or 4, further comprising before step (a) the steps of purifying a crude mixture of citalopram, and then forming a crude salt of citalopram from said crude mixture.
9. The process of claim 3 or 4, further comprising before step (a) the steps of freeing the citalopram base from a crude mixture of citalopram by treating a crude mixture of citalopram with a base, and  
10 optionally further purifying the citalopram base.
10. The process of claim 3 or 4, wherein the citalopram base is transformed into the hydrobromide or the hydrochloride salt of citalopram.
- 15 11. The process of claim 2 or 3, wherein the crude salt of citalopram is a hydrobromide, hydrochloride, sulphate, oxalate, phosphate or nitrate salt.
12. The process of claim 11, wherein the crude salt of citalopram is a sulphate, hydrobromide or hydrochloride salt.
- 20 13. The crystalline base of citalopram, or a hydrochloride or hydrobromide salt of citalopram, prepared by the process of claim 1 or 3.
14. The base, the hydrochloride or the hydrobromide salt of claim 13, having a purity of more than  
25 99.8 %w/w.
15. The base, the hydrochloride or the hydrobromide salt of claim 13, having a purity of more than 99.9% w/w.
- 30 16. A pharmaceutical composition comprising the hydrochloride or the hydrobromide salt of citalopram, or the crystalline base of citalopram, of claim 13.

17. The pharmaceutical composition of claim 16 which is a tablet prepared by
- a) direct compression of citalopram, optionally in admixture with pharmaceutically acceptable adjuvants;
  - b) by compression of a wet granulate of the citalopram, optionally in admixture with pharmaceutically acceptable adjuvants; or
  - c) by compression of a melt granulate of the citalopram, optionally in admixture with pharmaceutically acceptable adjuvants.
18. The pharmaceutical composition of claim 17, comprising the racemic mixture of citalopram base, citalopram hydrochloride or citalopram hydrobromide.
19. A crystalline base of citalopram, or a hydrochloride or hydrobromide salt of citalopram, having a purity of more than 99.8 %w/w.
20. A crystalline base of citalopram, or a hydrochloride or hydrobromide salt of citalopram, having a purity of more than 99.9% w/w.